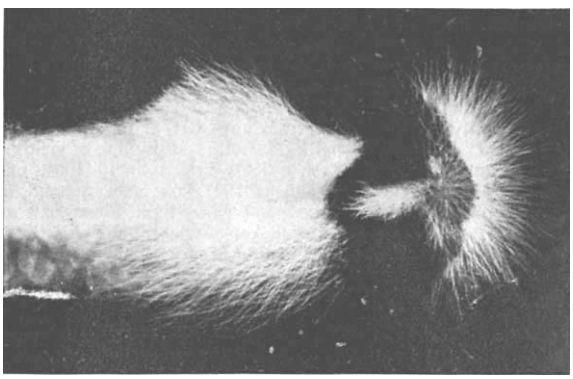
The momentary gleams of the electric light-play can be very easily observed by holding an albumen paper print thoroughly well self-dried on glass, paper side downwards, in a perfectly dark room over a hot room-stove to produce the paper's separation, and by stripping the print off downwards as soon as some edge of it has grown loose enough—probably with some signs of light—to allow it to be taken in the fingers. I have by this means now seen those brush and glow lights' flitting beams a second time, and there seems to be no difficulty of producing them in varied form and brightness by this method of proceeding. A. S. HERSCHEL.

Observatory House, Slough, December 10.

Photography of the Static Discharge.

The accompanying photograph of the spark of a large static machine may possibly be of some interest to the readers of NATURE. The machine is a large Holtz, used in the electrical department of St. Bartholomew's Hospital. It consists of eight glass plates of twenty-nine inches in diameter, inclosed in a glass case. It is driven by a motor which is worked by the 100 volt alternating main which supplies the electrical department with its alternating current. The initial charge is obtained from a small Voss machine which is inclosed in the case of the Holtz. The photograph was obtained in the following manner. The machine was started and the brass knobs of the conductors adjusted to give a spark of about seven inches in length. The knobs were now tested in the usual way (by presenting a metallic point to the conductors) with reference to the



sign of their charge. A gelatine dry plate was then taken, inclosed firstly in an orange and then in a black envelope. The plate was placed between the knobs of the conductors in a line parallel with them and the sparks allowed to play over the envelope for a period of one second of time. The plate was then taken to the dark-room, developed and fixed in the ordinary way. The accompanying illustration shows the curious results obtained. A distinct break can be seen in the continuity of the sparks between the positive and negative poles. Round the positive pole the sparks are rushing off in a dense mass with a direction from the negative pole of the machine. At the line of separation of this dense mass of sparks is seen a depression as if the mass had been eroded by the negative charge, reminding one very forcibly of what happens to the positive carbon of the arc light. At the negative pole the sparks are much less dense and more fan-shaped, and radiate in the reverse direction to the positive sparks with the exception of a cone of sparks, which are much smaller, which approach the depression in the positive mass. This prolongation of small sparks towards the positive pole is seen in each of the photographs obtained. The results of the experiment are curious. I am unable to explain them, but think they are perhaps worthy of record.

St. Bartholomew's Hospital. HUGH WALSHAM.

Malaria and Mosquitoes.

As I was reading the very interesting article by Dr. Fielding-Ould on the "Malaria Campaign," which appeared in NATURE of November 8, I was struck by the fact that the use of the mosquito-netting he suggests as an efficacious preventive against malaria fever was already arrived at several years ago through nothing but experience in one of the malaria districts in Syria. The following is a translation of a letter published in vol. viii. (April 1884) of the *Muktataf*, an Arabic literary and scientific review, edited in Cairo, Egypt, by Drs. Sarrûf and Nimr :—

"To the Editors of *Al-Muktataf*.

"GENTLEMEN,—I have already had the chance of observing the spread of the malaria fever in Rashiya, both in the autumns of 1878 and 1883, and I noticed that one of the principal agents in effecting its spread was the mosquito. I have also noticed that all those who, at the time of the epidemic, took precautions against the mosquito bites escaped the fever, a fact well known in this part of the country. I therefore conclude that mosquito nets which completely cover the bed and prevent the entrance of mosquitoes are the best fever preventives in countries abounding in malaria marshes.

ABDELLA JABBOUR,

Rashiya.

Trusting the above will find a place in your esteemed paper,

N. Y. SARRÛF.

Cairo, December 7.

Can Spectroscopic Analysis Furnish us with Precise Information as to the Petrography of the Moon?

THEORETICALLY I think we may reply in the affirmative, but whether our means of observation are, as yet, delicate enough to give give us trustworthy results I leave to the investigation of your readers.

As the question is of considerable interest, pardon me if I enter somewhat into detail.

(1) If we had two smooth, plane, parallel mirrors, perfectly elastic, and a gas jet midway between them, we might first light the gas and then extinguish it without destroying the illumination, for, if the mirrors were perfectly elastic, the waves of light would oscillate between the two for ever with undiminished intensity. We know that this is not the case, therefore no known substance is perfectly elastic.

(2) If direct solar light fall upon a large mass of sandstone, part of it penetrates the mass as heat, and part is reflected, with a diminished velocity, so that we might expect, *a priori*, an apparent displacement of the Fraunhofer lines, as compared with the spectrum of direct sunlight.

(3) Similar results might be looked for with regard to limestone, basalt, &c., but not identical, unless we make the very improbable supposition that all solids are equally elastic.

(4) Hence it should be possible to construct a table of relative photo-elasticities so that if the substance were given its elasticity might be found by inspection, and *vice versâ*.

(5) Next, analysing the sunlight reflected from various regions of the moon, and referring to our table, we might hope for answers to the questions

(α) Are Tycho, Copernicus and the Appenines basaltic?

(β) Is the Mare Tranquilitatis the dried-up limestone bed of a saltwater ocean, or the dried-up sandstone bed of a freshwater inland sea?

I admit, at once, that the observations suggested are of extreme delicacy, but I cannot consider them insurmountable in an age which has witnessed the proof of the regression and subsequent approach of Sirius to the solar system by this very method. W. J. KNIGHT.

Cork.

INTERNATIONAL CATALOGUE OF SCIENTIFIC LITERATURE.

AT the International Conference which met in London last June to discuss this subject, it was thought that the time had arrived when the great work of publishing a complete catalogue of all the scientific literature of the world might be undertaken with every prospect of success.

A Provisional International Committee was, therefore, appointed at the Conference to carry out the preliminary work, and this Committee reported the results of its labours to an International Council which met last week in the rooms of the Royal Society.

At this meeting, which took place on December 12 and 13, there were present:—Prof. B. Schwalbe, representing Dr. Milkau (Germany), Prof. G. Darboux, representing Prof. H. Poincaré, and Dr. J. Deniker (France), Prof. A. W. Rücker, Sir M. Foster, Prof. H. E. Armstrong and Dr. L. Mond (Great Britain), Prof. J. H. Graf (Switzerland), Dr. E. W. Dahlgren (Sweden), Prof. Korteweg (Holland), Dr. M. Knudsen (Denmark), Mr. Roland Trimen (Cape Colony), Dr. W. T. Blanford (India), Señor del Paso y Troncoso (Mexico), and M. Metaxas (Greece). Dr. Ludwig Mond represented Italy in the absence of Prof. Nasini. Sir Michael Foster was elected chairman of the meeting.

It is proposed that the annual cost of a set of seventeen volumes shall be 17*l.*, and on this basis it was announced that the number of sets subscribed for by the various countries was as follows:—

	Sets.
United States of America	68
Great Britain	45
Germany	45
France	35
Italy	27
Japan	15
Switzerland	7
Sweden	6½
Denmark	6
Holland	6
Norway	5
Mexico	5
Cape Colony	5
Canada	4½
Hungary	4
Portugal...	2
South Australia...	2
Western Australia	1
Victoria	1

One great difficulty in starting an enterprise of this magnitude is that a large amount of capital is needed to cover the preliminary expenses and to pay for the printing of the first set of volumes, and for other work which must be done before the grants from the various countries are received, and before any sales of the volumes to the public can be effected. This initial difficulty was met by the Royal Society, which generously offered to advance the necessary capital. This offer was accepted by the International Council, which expects to be in a position to repay the sum advanced during the next few years.

The Royal Society offered to act as the publishers of the catalogue, and to sign the necessary contracts with the printers and publishing agents. This offer was unanimously accepted by the International Council, which, after carefully examining the clauses of the proposed contracts, declared its approval of them.

The three principal countries which have not yet joined in the scheme are Russia, Belgium and Spain; and the Royal Society was asked by the International Council to address the Imperial Academy of Sciences of St. Petersburg on the subject, and also to take steps to induce the other countries to join in the catalogue.

A code of instructions for the use of all who are taking part in the preparation of the catalogue was considered, and, after some amendment, adopted.

In this connection the chief point discussed was whether it is desirable to publish complete lists of new botanical and zoological species. It was decided that lists of new species should be published, and that they should, as far as possible, contain all the additions to our knowledge in this direction made within the year.

It was also decided to include translations in the catalogue, but to indicate that they are translations. Schedules of classification for the subject indexes of the several sciences were adopted.

An executive committee was appointed, consisting of the four delegates of the Royal Society and the representatives of the four largest subscribers to the catalogue—France, Germany, Italy and the United States. Dr. H. Forster Morley was appointed director of the catalogue.

Finally, it was resolved to begin the work on January 1, 1901, and to include in the catalogue all literature published after that date.

FURTHER REMAINS FROM LAKE CALLABONNA.[1]

THE undermentioned Memoir is the second of a series, dealing with the remains of the great extinct vertebrates discovered in the Lake Callabonna in South Australia during the expedition already commented upon in our pages (NATURE, vol. lxi. p. 275, 1894), and now famous for having yielded the materials for a fuller knowledge of the osteology of the remarkable marsupial, colossus Diprotodon. The present contribution deals entirely with the great flightless bird Genyornis, which was found in association with this, and is for the most part an extended and illustrated account of portions of its skeleton, which the authors have already more briefly described in the Transactions of the Royal Society of South Australia and elsewhere. It is divided into two parts, a first dealing with the bones alone, a second containing an account of the surroundings and physical features of the Lake and the characters of its bed, of its geology, and the history of its investigation, all of which are special and detailed, and have for the greater part received prior consideration in our pages in the aforementioned article and in its predecessors therein referred to by the authors themselves (NATURE, vol. l. pp. 184 and 206), permission to quote freely from which they herein acknowledge.

It is with the first part of the Memoir we are chiefly concerned, and the newer facts it sets forth are the outcome of the results of comparison with the numerous remains described of those of allied genera mostly preserved in the Australian Museums. In dealing with these the authors pay a just tribute to the work and energetic enthusiasm of Mr. R. Etheridge, junr., the indefatigable curator of the Sydney Museum, whose Memoir on the subject in the "Records of the Geological Survey of New South Wales" is taken as the basis of their inquiry; and, as the outcome of this portion of the work, they have been led to associate with the Callabonna genus certain skeletal fragments, previously collected in South Australia, Queensland, and New South Wales, of Pliocene and Pleistocene age, especially a portion of a tibia from Mount Gambier, of a femur and some tibiæ from Normanville, of a tibia from the Paroo River, and of a fragment of a pelvis from the Canadian Gold Lead in New South Wales, most of which had been referred by Owen and Etheridge, junr., to the genus Dromornis.

The generic name Genyornis is expressive of the great size of the lower jaw, and a fuller description of this is, we presume, reserved for a promised detailed memoir in course of preparation. The present one treats mainly of the limb bones, shoulder girdle and sternum, and the most noteworthy facts recorded are the numerical reduction of the phalanges of the outermost (fourth) digit to four, and the great slenderness, indicative of reduction, of the innermost or second, which, for the Ratitæ, are exceptional features. These characters notwithstanding, the authors, from a careful study of the measurements of the long bones and particularly of all that concerns the sternum, which is here for the first time fully described, regard the Emeu as the nearest living ally of this aberrant genus, and to the justice of

[1] "Fossil Remains from Lake Callabonna." Part II.. (1) Genyornis Newtoni. (2) The Physical Features of Lake Callabonna. By E. C. Stirling, F.R.S., and A. H. C. Zeitz, C.M.M.Z.S. (Mem. Royal Soc., S. Austr., vol. i. Part 2, pp. 41–80 and i.–xv., 6 photographic plates, 1900.)